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G4R RRQ R1X R10E R9F

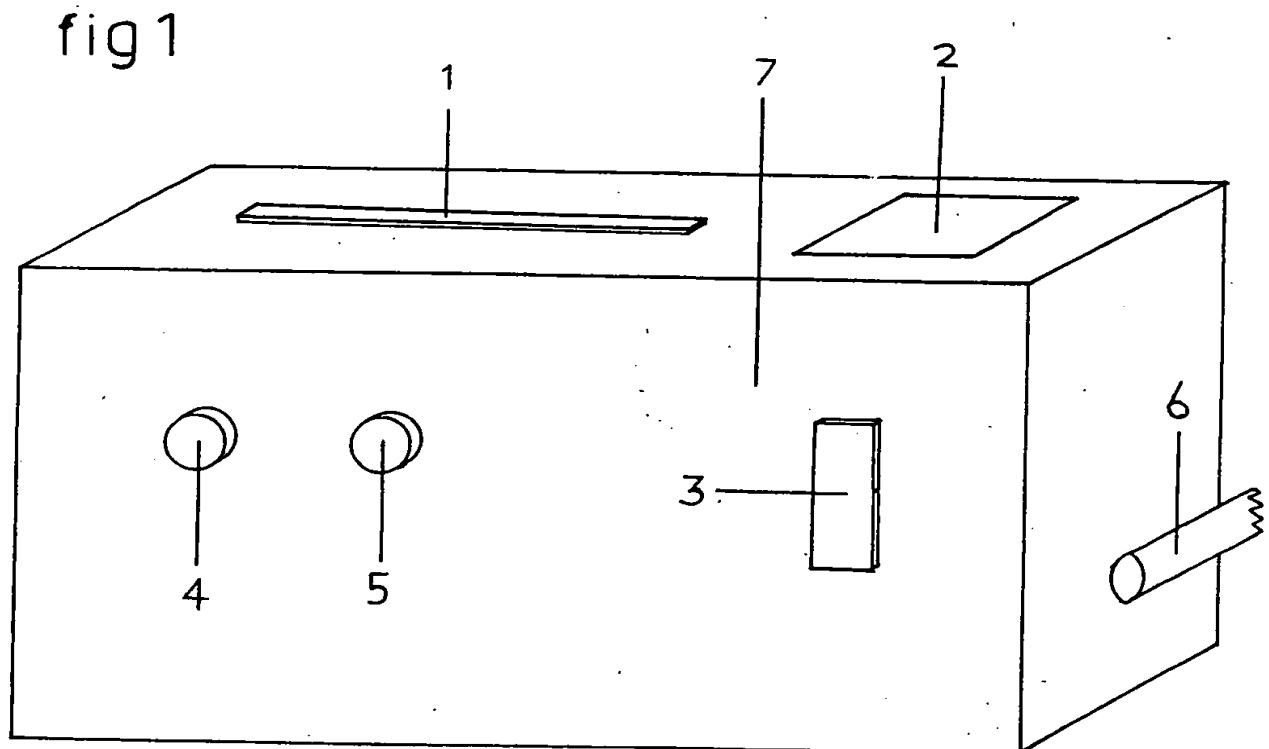
(56) Documents cited  
GB 1506611 A GB 1338787 A GB 1305248 A  
WO 88/04457 A1 US 4053228 A

(58) Field of search  
UK CL (Edition K) G4R REF REP RPF RRD RRH  
RRL RRM RRQ RRT  
INT CL<sup>5</sup> A61B, G06K, G07C

(54) Bank/credit card laser read fingerprint comparator

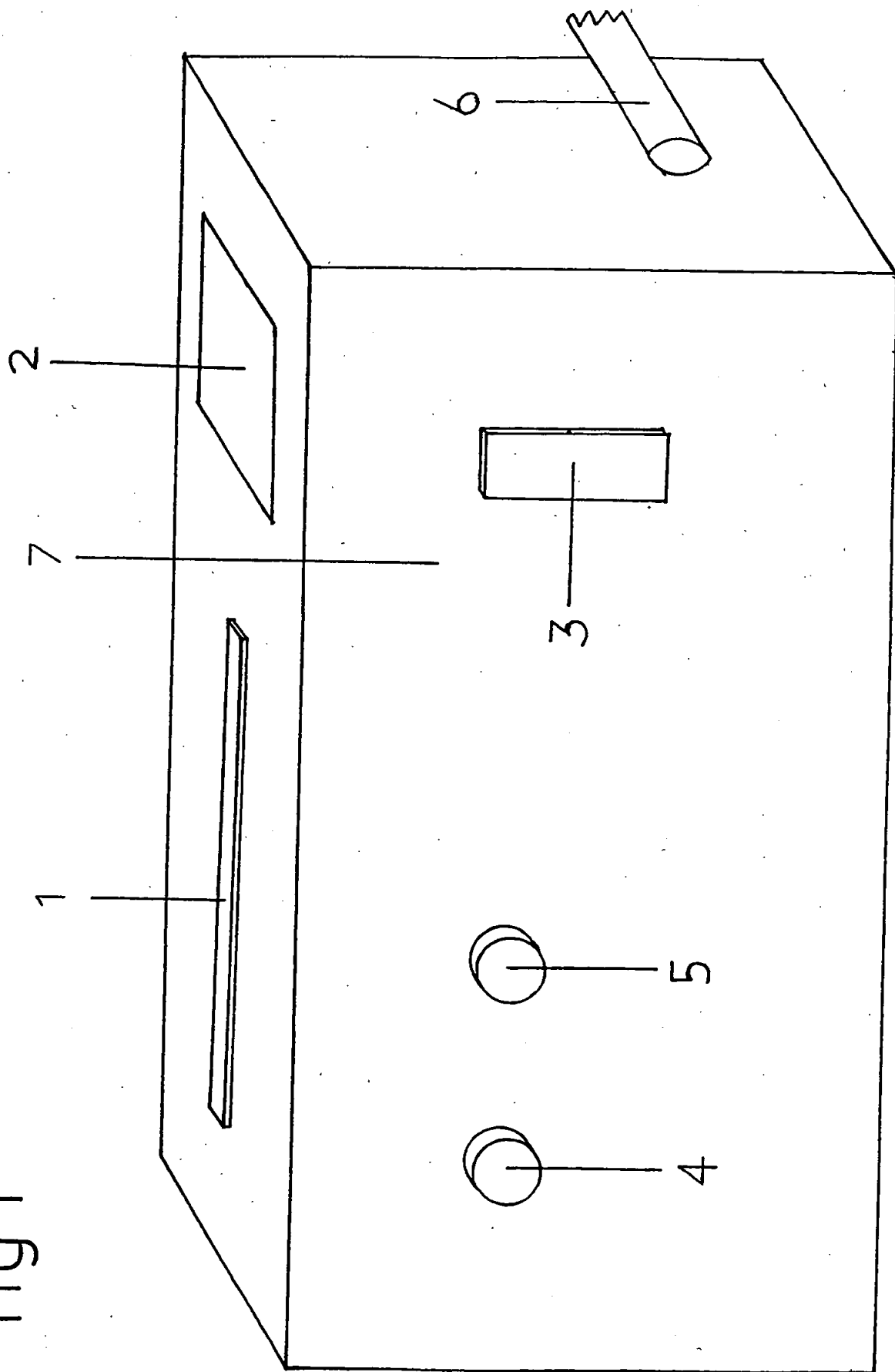
(57) A laser read fingerprint comparator consists of a metal or plastics casing 7 in which a bank/credit card is inserted into a slot 1. A finger pad 2, with a laser device for reading fingerprints beneath, is on the top of the unit. At the side there is a switch 3 which is turned on when a card is inserted into the slot 1 and a finger placed on the pad 2.

If the print on the card matches with the finger on the pad 2, a green light 4 will be activated. When the switch 3 is turned on the red light 5 shows, this will indicate that the fingerprints do not correspond.



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fig1



## BANK/CREDIT CARD LASER READ FINGERPRINT COMPARITOR

This invention relates to fingerprints read by a laser for bank/credit card fraud protection.

Bank/credit card fraud amounts to losses of tens of millions of pounds per annum to the major banks and credit houses. At the present time there is no certain way of stopping a stolen bank card from being used soon after it has been stolen, often before it is reported lost.

Anyone who has a stolen card only needs to practise the signature on the rear to a vague likeness of the original before using the card to buy goods. At present there is no secondary way of telling if the card has recently been stolen. The fingerprint unit ensures that only the original owner can use any one card.

When a bank issues a new card to a customer, he/she would also be given a small pad of quick drying indelible ink with which to instate a fingerprint (any finger) on the new card within a specified area. This print cannot be removed without damaging the card.

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When using the card for purchasing goods the cashier would insert the card into the unit and ask the customer to place a finger (the same finger must be used to match the card pad) onto the laser pad.

A switch at the side of the unit would then be activated by the cashier so the laser could read the fingerprint on the pad and match it with the fingerprint on the bank card. If the two prints match, a green light will be illuminated which means that the card belongs to the customer. If the two prints do not match, or the card has been tampered with, a red light would show and make the cashier suspicious.

This system will make it impossible for any stolen card to be used by anyone other than the person for which it was intended.

## WITH REFERENCE TO THE DRAWING

The card is inserted into a slot 1 on the top of the unit 7, shown in FIG 1 and a finger (the same one as used to mark the card originally) placed on the laser read finger pad.

A switch 3 is then activated and a laser reads the fingerprint on the laser pad and compares it with the fingerprint on the card.

If the two prints match, a green light 4 will illuminate to notify the cashier that the card is in use with the legal owner.

When the switch 3 is activated and a red light 5 shows this will signify that the fingerprint on the card and the fingerprint on the laser read finger pad 2 do not match, notifying the cashier that the card is not being used by the rightful owner.

The unit is powered by standard mains electricity 6.

## CLAIMS.

1. A laser read fingerprint comparitor situated beneath a finger pad, enclosed within a metal / plastic box, to be used as a prevention against fraud, by comparing a fingerprint, against a pre-installed fingerprint, on a bank / credit card.
2. A laser read fingerprint comparitor as Claimed in Claim 1, will read the fingerprint of a finger placed on a finger pad situated on top of the unit, and compare it with the fingerprint on a card, previously inserted into a slot also located on the top of the unit.
3. A laser read fingerprint comparitor as Claimed in Claim 1 or Claim 2 is activated by means of a switch, located at the side of the box.
4. A laser read fingerprint comparitor as Claimed in Claim 1, when activated by the switch, as Claimed in Claim 3, will scan and compare the fingerprint on the card, against the finger placed on the finger pad.
5. A laser read fingerprint comparitor as Claimed in any previous Claim, will identify the similarities between the card and the finger, and if the two match, a green light at the side of the box will show.

Cont...

## CLAIMS (Cont)

6. A laser read fingerprint comparitor as Claimed in Claim 1 and Claim 2, will scan and compare the fingerprint on the card against the finger placed on the pad, if the two do not match, a red light at the side of the box will show.

7. A laser read fingerprint comparitor as Claimed in any previous Claim is powered by standard mains electricity.

8. A laser read fingerprint comparitor as described herein with reference to FIG 1 of the accompanying drawing.

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Patents Act 1977

Examiner's report to the Comptroller under  
Section 17 (The Search Report)

Application number

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Relevant Technical fields

- (i) UK CI (Edition K) G4R (REF, REP, RPF, RRD, RRH, RRL, RRM, RRQ, RRT)
- (ii) Int CI (Edition 5) A61B, G06K, G07C

Search Examiner

J DONALDSON

Date of Search

05 JUNE 1991

Databases (see over)

(i) UK Patent Office

(ii)

Documents considered relevant following a search in respect of claims

1 to 8

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 1506611 (GREEN) see page 4 line 62 page 5 line 5, page 8 lines 87-115	1-8
X	GB 1338787 (KMS) see page 2 line 83 - page 3 line 115	1-7
X	GB 1305248 (BAC) see page 1 line 49 - page 2 line 9	1-7
X	WO 88/04457 A1 (FROELICH) see page 8 line 3 - page 9 line 15, page 15 line 12, page 16 line 11	1-7
X	US 4053228 (SCHILLER) see column 3 line 5 - column 4 line 24	1-7



Category	Identity of document and relevant passages	Relevant to claim(s)

**Categories of documents**

**X:** Document indicating lack of novelty or of inventive step.

**Y:** Document indicating lack of inventive step if combined with one or more other documents of the same category.

**A:** Document indicating technological background and/or state of the art.

**P:** Document published on or after the declared priority date but before the filing date of the present application.

**E:** Patent document published on or after, but with priority date earlier than, the filing date of the present application.

**&:** Member of the same patent family, corresponding document.

**Databases:** The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).

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